

REMARKS

By the present amendment, the Abstract has been amended to improve its presentation. Independent claims 1, 4 and 7 have been amended to further clarify the concepts of the presently claimed invention. Specifically, claim 1 has been amended to recite that the subject methods are conducted without application of electromagnetic waves. Support for the subject matter added to the independent claims may be found on lines 6-7 of page 13 of the subject specification. Claim 3 has been amended to obviate the examiner's objections thereto and dependent claims 2 and 5 as well as independent claim 8 and 9 have been canceled. Entry of these amendments is respectfully requested.

In the Office Action, the Abstract was objected as containing a so-called "run-on sentence." That is, it was asserted that the Abstract is one sentence which should be separated into two or more sentences for greater clarity. As mentioned above, the Abstract has been amended herein.

Claim 3 was rejected under the second paragraph of 35 USC § 112 as being indefinite. Specifically, it was alleged that the use of the phrase "or the like" in connection with "PCB" does not precisely define the invention. In response, the claim has been amended to delete the phrase "or the like." Accordingly, withdrawal of the rejection under the second paragraph of 35 U.S.C. § 112 is respectfully requested.

Claims 1-9 were rejected under 35 USC § 103(a) as being unpatentable over the cited patent to Anderson et al in view of the patent to Cooper et al. In making this rejection, it basically was asserted that the former patent teaches the entire method as set forth in the claims with the exception of the use of a photocatalyst in powder form. The Cooper et al patent was then asserted to teach such a photocatalyst powder. Reconsideration of this rejection in view of the above claim amendments and the following comments is respectfully requested.

Before discussing the rejection in detail, a brief review of the presently claimed invention may be quite instructive. In one aspect, the invention relates to a method for decomposing organic substances wherein a liquefied organic substance is applied, from an upper side, to photocatalyst powder, and the photocatalyst powder is heated to between 50 and 400°C without application of electromagnetic waves. In another aspect, the invention relates to a method for decomposing organic substances wherein a gaseous organic substance is caused to contact with photocatalyst powder, and the photocatalyst powder is heated to between 50 and 400°C without application of electromagnetic waves. In still a further aspect, the invention relates to a method for decomposing organic substances wherein an organic substance to be decomposed is introduced, in a state of gas, liquid or solid, into a suspension of finely divided particles of photocatalyst and is heated in a range between 50 and 100°C without application of electromagnetic waves.

The subject methods include, among other, the following features:

(1) The methods of decomposing organic substances is performed without applying electromagnetic waves such as ultraviolet, a photocatalyst is used and there is heating to 50 to 400°C.

(2) The photocatalyst used in the subject methods is one which is excited by ultraviolet and show an effect as a catalyst even at room temperature.

(3) The subject methods for decomposing organic substances do not apply ultraviolet or the like electromagnetic waves, even though they employ the above photocatalyst.

It is submitted that such methods and features thereof are not taught or suggested by the cited patents to Anderson et al and Cooper et al, whether taken singly or in combination.

More particularly, the Anderson et al patent appears to teach the treatment with liquid or gaseous organic substances with a photocatalyst and UV light. The Cooper et al patent seems to teach the use of a photocatalytic powder in a suspension. Thus, both of these patents teach methods for decomposing materials with a photocatalyst which utilize the application of ultraviolet. As specifically mentioned above and as now recited in the amended claims, the subject methods of decomposing organic substances are performed without applying electromagnetic waves such as ultraviolet and are in distinct contrast to that disclosed in the cited patents.

Serial Number: 10/671,514
OA dated September 20, 2006
Amdt. dated January 22, 2007

Further with respect to the patentability of the present claims, applicants wish to bring to the attention of the examiner U.S. Patent No. 7,034,198 to Osada et al, assigned to the same assignee as the present application, which is directed to similar subject matter to the presently claimed invention.

For the reasons stated above, withdrawal of the rejection under 35 U.S.C. § 103 and allowance of claims 1, 3, 5 and 7 as amended over the cited patents are respectfully requested.

In view of the foregoing, it is submitted that the subject application is now in condition for allowance and early notice to that effect is earnestly solicited.

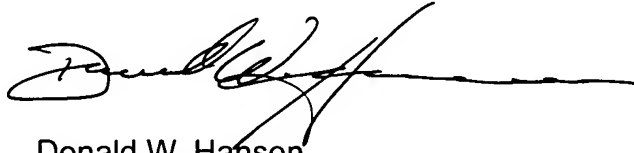
In the event this paper is not timely filed, the undersigned hereby petitions for an appropriate extension of time. The fee for this extension may be charged to Deposit

Serial Number: 10/671,514
OA dated September 20, 2006
Amdt. dated January 22, 2007

Account No. 01-2340, along with any other additional fees which may be required with respect to this paper.

Respectfully submitted,

ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP



Donald W. Hanson
Attorney for Applicants
Reg. No. 27,133

Atty. Docket No. 031204
Suite 1000, 1725 K Street, N.W.
Washington, D.C. 20006
(202) 659-2930
DWH/rab



23850

PATENT TRADEMARK OFFICE